

Remarks

This is in response to the Official Action mailed August 22, 2006. Applicants note with appreciation the Examiner's careful review of the pending application. In order to organize the arguments and keep them appropriately concise, Applicants' remarks are directed at the rejections to the independent claims (1, 40, 48 and 55). Applicants respectfully submit that because the independent claims are allowable, the dependent claims are allowable as well.

Beginning in Paragraph 7 of the Official Action, the Examiner takes the position that claims 55-57 and 60 are anticipated under § 102(b) by Travelute, No. 5,407,625.

In initial response, Applicant again repeats the basic requirement of § 102—a reference does not anticipate a claim unless every element in the claim is met explicitly or inherently by the reference.

Travelute lacks any disclosure or suggestion of the irregular longitudinal surface effects recited in Claim 55. Accordingly, Travelute '625 cannot explicitly anticipate claim 55.

The Examiner takes the position, however, that because Travelute '625 discloses a hollow polyester filament with as much as 25-35 percent void space, it would somehow have the same surface effects that Claim 55 recites.

In response, Applicants first point out that the void space described by Travelute in characterizing a hollow filament is not the same characteristic as the porosity of a foamed filament. Accordingly, Travelute does not meet this element of claim 55.

Second, Applicants respectfully point out that the density of the filament is not necessarily related to its surface character and that the Examiner's attempt to link these two characteristics lacks support. Stated as a question, why would the density of a filament reveal anything about the surface characteristics of the filament?

Third, the Examiner's broad characterization that both the Travelute filament and the claimed filament are formed by methods that include steps of, "quenching, relaxing, drawing

and heat setting,” is insufficient to demonstrate that the two filaments are produced by exactly the same technique and thus must have (even if inherently) identical characteristics. Almost all filaments produced for any purpose using any polymer include such a broad recitation of method steps and thus these widely applicable steps cannot be used, at least in the manner offered by the Examiner, to conclude that the two fibers inherently have the same properties.

As a final point, Claim 55 recites that the irregular longitudinal surface effects are at least an order of magnitude in length greater than the average diameter of the fiber and that their width is at least an order of magnitude smaller than the average diameter of the fiber. Nothing in Travelute ‘625 discloses any such characteristics.

Accordingly, the 102(b) rejection against Claim 55 based on Travelute ‘625 must be withdrawn.

Paragraph 7 of the Office Action also takes the position that the irregular longitudinal surface effects recited in Claim 55 are obvious in light of Travelute ‘625. Applicant respectfully submits that nothing in Travelute ‘625 suggests these characteristics, nor does Travelute ‘625 offer the skilled person any motivation to modify the filament of Travelute ‘625 into the filament of the claimed invention. Only an impermissible hindsight view of the claims provides such motivation. Stated as a question, why would Travelute offer the skilled person any motivation to modify the Travelute filament into some other filament?

Applicant thus respectfully submits the § 103 rejections against Claim 55 that are based on Travelute ‘625 must be removed.

In Paragraph 8, the Examiner rejects independent Claim 1 (and several of the dependent claims) as obvious under a combination of Siggel No. 4,164,603, Nichols No. 6,485,829, and Soehngen No. 4290987.

In response, Applicants first note that Paragraph 8 admits that neither Siggel nor Soehngen discloses or suggests the use of a polyester copolymer that has a greater elasticity than a corresponding monomer-based polyester (as recited in Claim 1). In attempting to rationalize incorporating Nichols ‘829 into the § 103 combination, the Examiner takes the

position that Nichols teaches that the wicking and wetting properties of a fabric can be increased by using a polyester copolymer. In doing so, the Examiner makes the assumption that the skilled person desires these properties and then uses the assumption as the motivation to argue that Nichols should be combined in the rejection against Claim 1.

Although Applicants certainly admit that Nichols describes the type of copolymers that are useful in the invention, the Examiner's unilateral choice of a property disclosed in a prior art patent, combined with the Examiner's assumption that the property is desired in the claimed subject matter, cannot substitute for the logical choice of the person skilled in the art.

Needless to say, the entire argument is circular; i.e., nothing other than hindsight leads to the selected prior art. Instead, the Examiner (i) selects a property in the prior art (and about which the claim is silent), (ii) argues without basis that the property is desired in the claim, and (iii) concludes that motivation to include the property has thus been established. Under such logic, any patent could be applied against any claim on the grounds that a property in the prior art patent was "desired" in the claim even when the claim includes no such recitation.

In the present application, the specification likewise offers no discussion about a wicking or wetting.

Accordingly, Applicants submit that the Examiner has no reasonable grounds to apply the Nichols patent against Claim 1 other than a hindsight desire to find a reference that includes a copolymer.

Paragraph 8 cites Soehngen as providing the motivation to obtain a nucleating agent in a relatively small amount. In response, Applicants point out the significant differences between the Soehngen patent and Claim 1. Claim 1 recites a polyester copolymer, while Soehngen specifically recites a polyolefin with both amorphous and crystalline components. Soehngen starts with a hollow filament polyolefin with a specific molecular orientation; then contacts the hollow fibers with a swelling agent until the olefin absorbs the swelling agent; then stretches the soaked, swollen olefin fibers; and finally removes the swelling agent from the hollow olefin fibers while keeping the hollow olefin fibers stretched.

Although the swelling and stretching steps described by Soehngen may produce a material with openings, the net result is in the nature of a solid filament that has been pulled sufficiently under chemical stress to produce micro-porous openings. This is nonanalogous to the extrusion of a foamed polymer as set forth in the pending application. Accordingly, although the Soehngen patent nominally mentions that fluorinated hydrocarbons can be used as nucleating agents, no reason exists for the skilled person to look to Soehngen's swelling and stretching method in order to produce a foamed fiber. Thus, as in the case of the other references, the Soehngen reference appears to have been selected almost entirely in hindsight.

In Paragraph 10, the Examiner rejects claims 55-57 and 16 (Claim 55 is independent) as anticipated by or obvious over Li No. 4,626,390. In response, Applicants point out that Li never discloses the subject matter of Claim 55 within its four corners, and thus must be removed as a § 102 reference. Specifically, Li fails to disclose the irregular longitudinal surface effects that in length are at least an order of magnitude greater than the average diameter of the fiber and that in width are at least an order of magnitude smaller than the average diameter of the fiber. Absent this characteristic, Li cannot be applied as a 102 reference against Claim 55.

For similar reasons, Claim 55 cannot be considered obvious in view of Li because nothing in Li offers any motivation to modify Li's filaments to meet the recitations of Claim 55. Absent such motivation, Li cannot support a § 103 rejection.

In Section 11, the Examiner rejects independent Claim 1 (and several related dependent claims) as obvious under a combination of Li '390 and Nichols '829. This combination suffers from the same weaknesses as do the individual references and earlier combinations. Specifically the Examiner has admitted that Li lacks any disclosure of the use of polyester copolymer.

Adding Nichols fails for the same reason as set forth above; namely, the Examiner is the one making the assumption that wetting and wicking properties represent the motivation for using a copolymer. Again, neither the pending claims nor the pending specification refer

to wicking or wetting properties of the underlying chemical composition. Accordingly, the motivation rests entirely with the subjective interpretation for the Examiner rather than the objective content of the prior art.

As an additional point, Nichols fails to suggest anything about foamed filaments and thus specifically fails to offer any suggestion as to why a foamed filament using a greater elasticity polyester copolymer should be selected (or attempted) in comparison to a monomer-based polyester.

Paragraph 14 adds Travelute to the Li and Nichols combination in order to argue against the patentability of independent claims 40 and 48 on an obviousness basis. This combination must fail for reasons similar to those under which the earlier combinations fail. Namely, the references neither provide nor suggests the recitations of claims 40 or 48.

First, with respect to Claim 40, Li lacks the polyester copolymer, lacks the minimum 40 percent of void space, and lacks the different degrees of orientation along longitudinal portions of the filament. Neither Nichols nor Travelute cure these deficiencies. Nichols teaches the copolymer, but nothing about Li suggests that Li's performance or characteristics could be improved by a copolymer and thus no objective motivation exists to combine these two references for any purpose.

Travelute has different degrees of orientation, but in the context of hollow, rather than foamed, filaments. Similarly because Travelute fails to disclose or suggest any surface effects whatsoever, it cannot support a combination of any type. Accordingly no motivation likewise exists to combine Travelute with Nichols or Li for any particular purpose other than a hindsight view of the claims.

With respect to Claim 48, only Travelute suggests a hollow filament, and never suggests that the hollow filament could be foamed. Once again, Nichols merely offers a copolymer, and with respect to the recitations of Claim 48, Li offers nothing other than a general recitation of foam. Thus, once again the references can only be applied against Claims 40 or 48 in hindsight.

The Terminal Disclaimer—Double Patenting

Applicants note with appreciation the Examiner's review of the arguments on this point in the last response. In light of the Examiner's consideration and maintenance of the double patenting rejection, Applicants are submitting an appropriate terminal disclaimer and submit that this meets the Double Patenting rejection (Paragraph 16 of the office action).

As noted above, Applicants this respectfully submit that because the independent claims are allowable, the dependent claims are allowable as well and thus no further specific comment is made about them. Applicant is, of course, willing to take them up on a case-by-case basis as may be necessary depending upon the disposition of the independent claims.

Respectfully submitted,



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